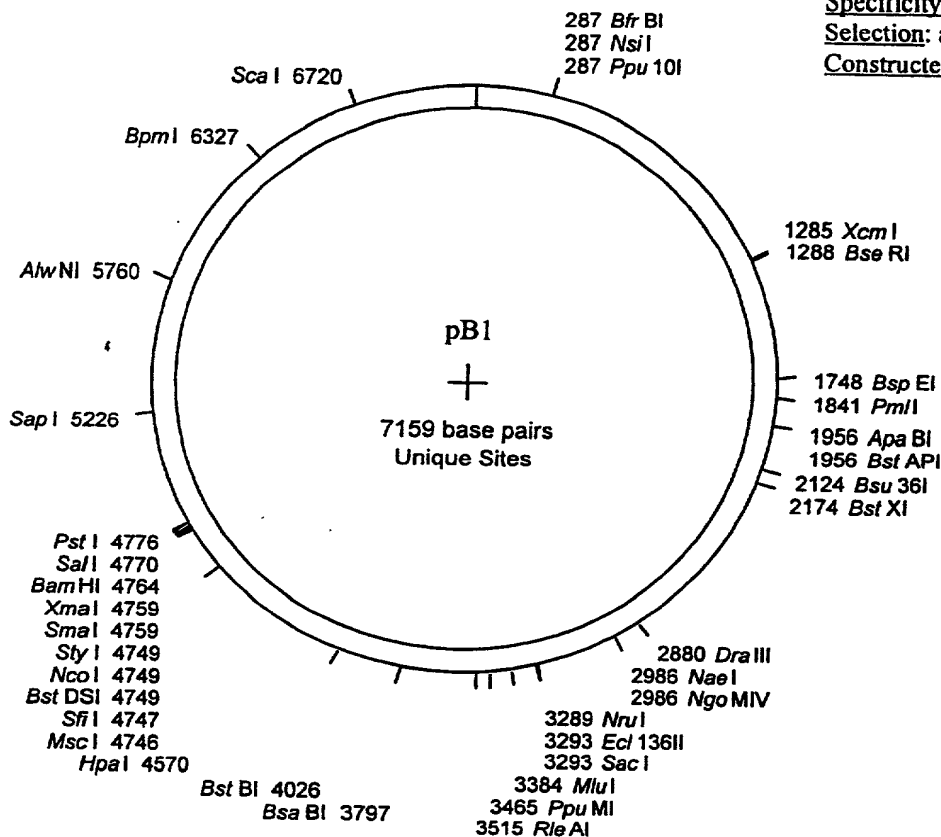


pB1

Alias: pAS2DD
 Application: 2HY (bait)
 Backbone:
 Specificity:
 Selection: ampicillin
 Constructed by:



Oligo 160

gagagtagtaacaaaggtc AAAGACAGTTGACTGTATCGCCG GAA TTT AT

Sfi I **Sma I** **BamH I** **Sal I** **Pst I**

G GCC ATG GAG GCC CCG GGG ATC CGT CGA CCT GCA GCC

Nco I

Oligo 161

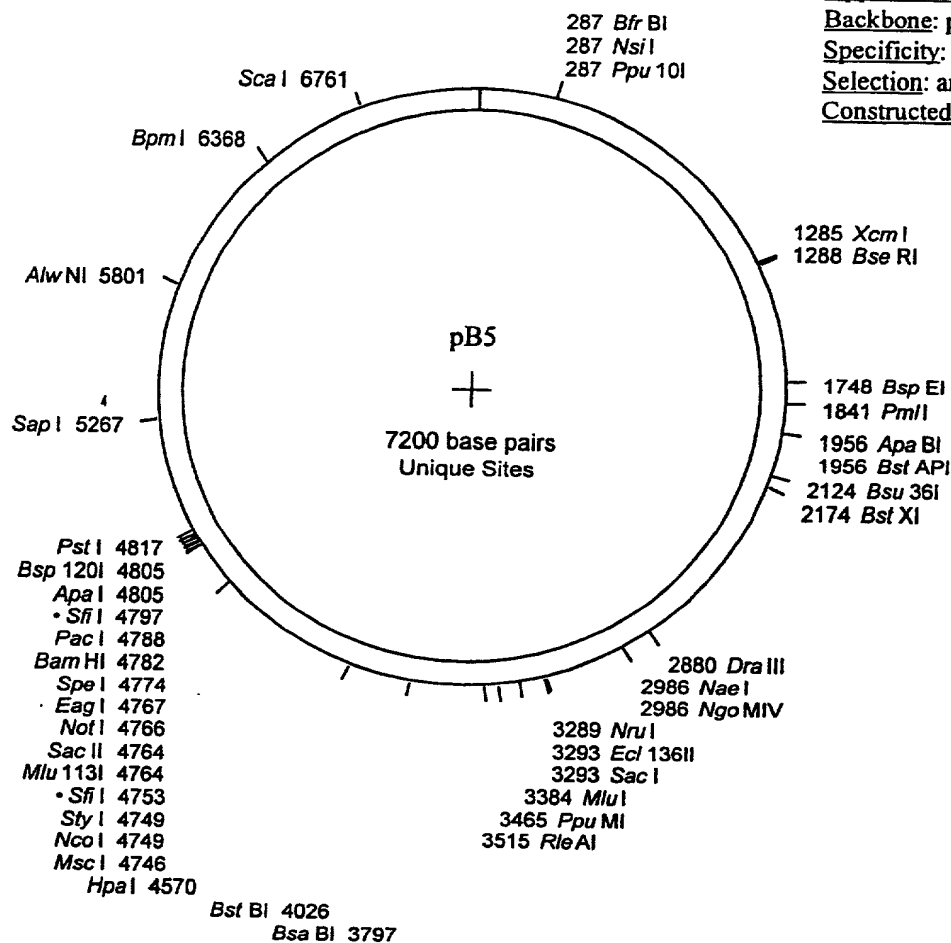
AAG CTA ATT **ccgggcgaattcttatg**

Oligo 160 5' GAGAGTAGTAACAAAGGTC 3'
 Oligo 161 5' CATAAGAAATTCGCCCCGG 3'

FIGURE 1

pB5²

Alias: pAS2DDNS1
Application: 2HY (bait)
Backbone: pAS2DD
Specificity: Sfi non-oriented
Selection: ampicillin
Constructed by: SW



Oligo 160

gagagtagtaacaaaggtc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

Sfi I **Sac II** **Spe I** **Bam HI**
 GCC ATG GCC GCA GGG GCC GCG GCC GCA CTA GTG GGG ATC C
Nco I **Not I**

STOP **Sfi I** **Pst I**
 TT AAT **TAA** GGG CCA CTG GGG CCC CTC GAC CTG CAG CCA
Pac I

Oligo 161

AGC TAA TT **ccgggcgaattcttatg**

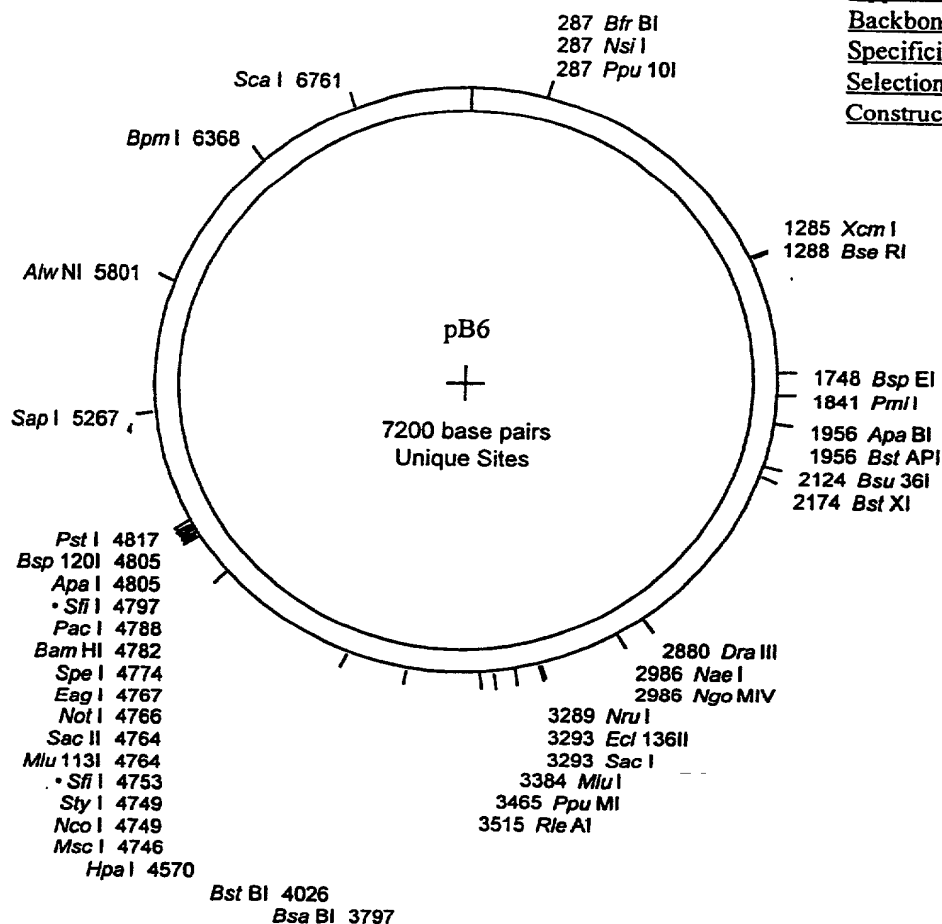
Oligo 160 5' GAGAGTAGTAACAAAGGTC 3'

Oligo 161 5' CATAAGAAATTCGCCCCG 3'

FIGURE 2

3 pB6

Application: 2HY (bait)
Backbone: pAS2DD
Specificity: Sfi oriented
Selection: ampicillin
Constructed by: SW



Oligo 160

gagagtagtaacaaaggctc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

GCC ATG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C

Sfi I **Sac II** **Spe I** **Bam HI**

Nco I **Not I**

TT AAT STOP TAA GGG CCA CTG GGG CCC CTC GAC CTG CAG CCA

Pac I **Sfi I** **Apa I** **Pst I**

Oligo 161

AGC TAA TT **ccgggcgaatttctatg**

Oligo 160 5' GAGAGTAGTAACAAAGGTC3'
Oligo 161 5' CATAAGAAATTCGCCCCGG3'

FIGURE 3

4

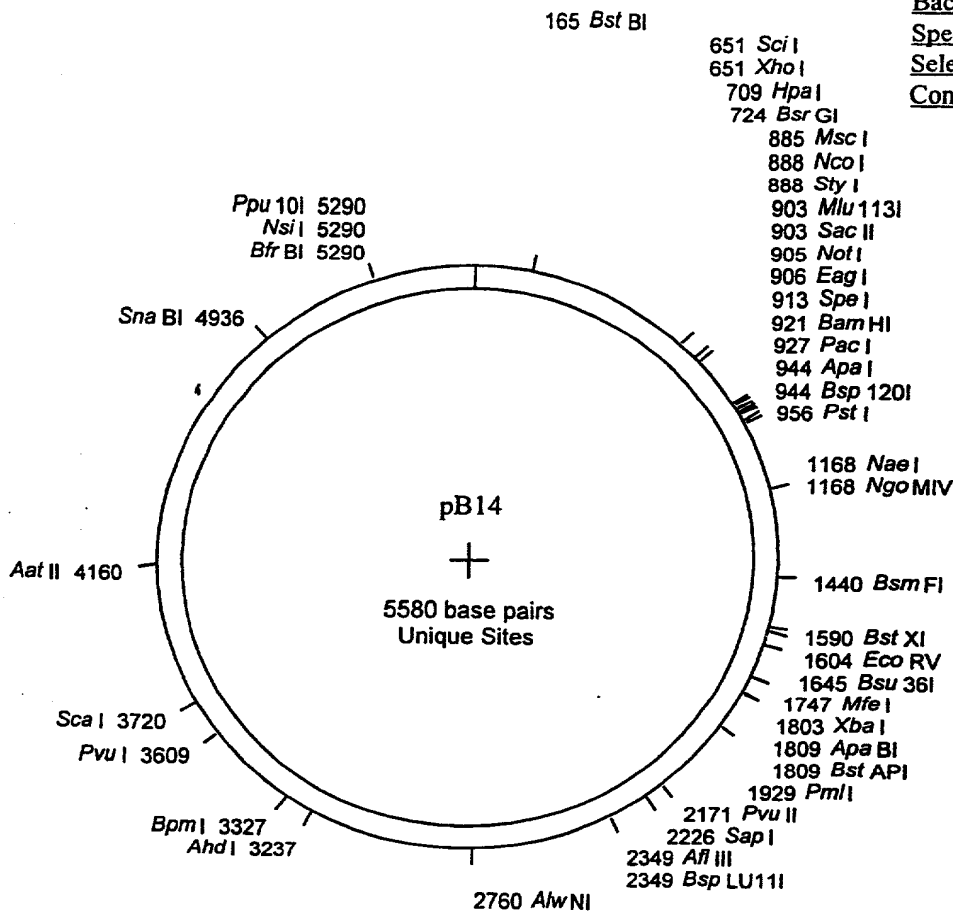
165 *Bst* BI

Oligo 161

FIGURE 4

5
pB14

Alias: pGBT9NS2
Application: 2HY (bait)
Backbone: pGBT9
Specificity: Sfi oriented
Selection: ampicillin
Constructed by: CR



Oligo 160

gagagtagtaacaaaggctc AAAGACAGTTGACTGTATCGCCG GAA TTT ATG

Sfi I *Sac* II *Spe* I *Bam* HI
GCC ATG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C
Nco I *Not* I

Pac I *Sfi* I *Apa* I *Pst* I
TT AAT **STOP** TAA GGG CCA CTG GGG CCC CTC GAC CTG CAG CCA
Pac I

Oligo 161

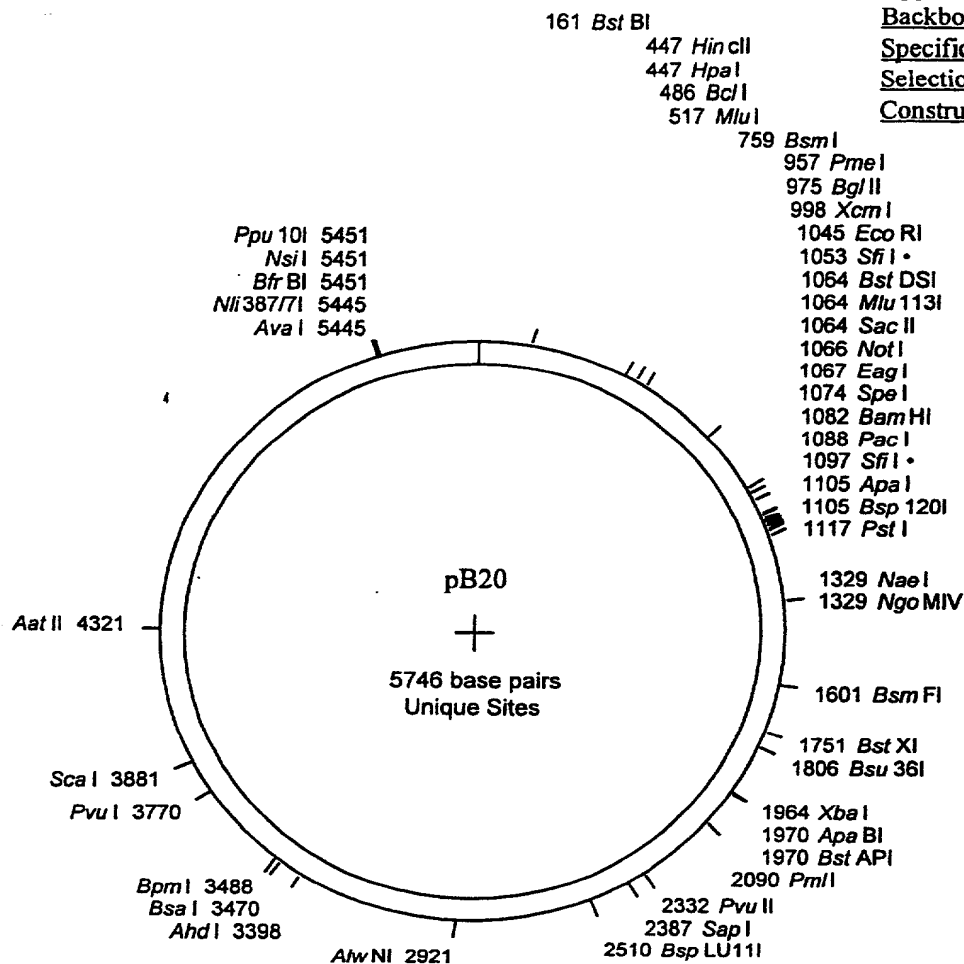
AGC TAA TT ccgggcgaatttcttatg

Oligo 160 5' GAGAGTAGTAACAAAGGTC3'
Oligo 161 5' CATAAGAAATTCGCCCCGG3'

FIGURE 5

pB20⁶

Alias: pLex10NS2
Application: 2HY (bait)
Backbone: pLex10 (pB9)
Specificity: Sfi-oriented
Selection: ampicillin
Constructed by: LD



EcoR I Sfi I Not I Spe I BamH I
 GAA TTC GGG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C

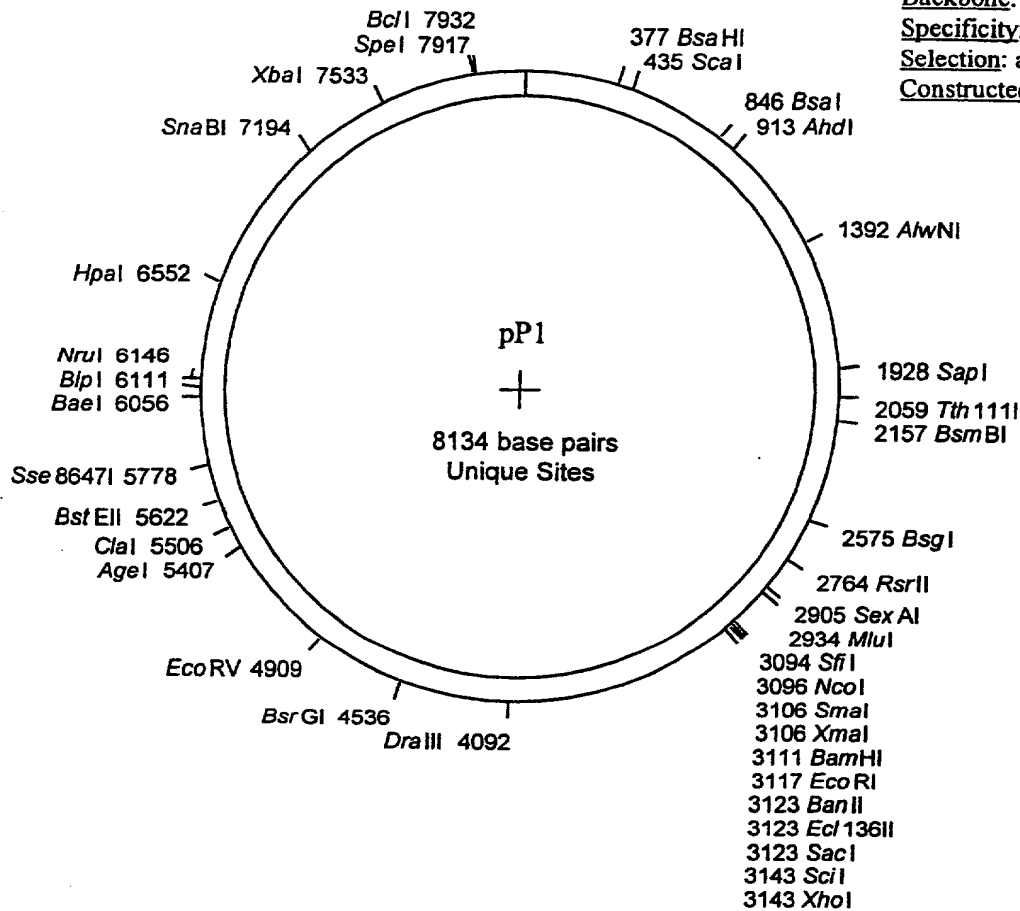
Sac II

TT AAT TAA GGG CCA CTG GGG CCC CTC GAC CTG CAG
Pac I Sfi I Pst I

FIGURE 6

7 pP1

Alias : pACTIIst
Application: 2HY (prey)
Backbone: pACTII
Specificity:
Selection: ampicillin
Constructed by:



ABS1

cgtttggaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

Bgl II

cgatgatgaagatacccccaccaa CCCAAAAAAGAGATCTGTATGGCTTACCCATACGATGTTCCAG

Sfi I

Sma I

BamH I

ATTACGCTAGCTTGGGTGGTCATATGGCC ATG GAG GCC CCG GGG ATC CGA ATT

Sac I

Nco I

Xho I

Bgl II

CGA GCT CGA CTA GCT AGC TGA CTC GAG AGA TCT ATGAAT

cgtagatactgaaaaacccc GCAAGTT cactcaactgtgcatcgtg caccatctcaatttc

162

ABS2

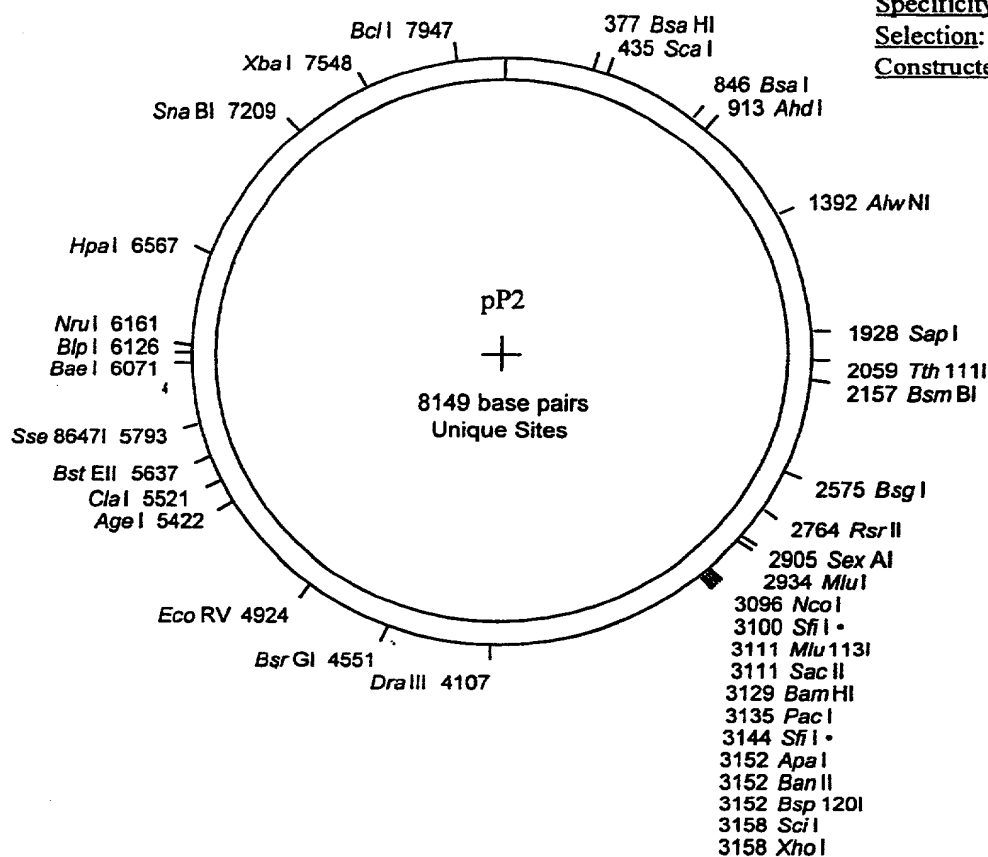
53

ABS1 5' CGTTTGGAATCACTACAGG 3'
 JC90 5' CGATGATGAAGATACCCACCAAAA 3'
 162 5' GGGGTTTTTCAGTATCTACG 3'
 ABS2 5' CACGATGCACAGTTGAAGTG 3'
 53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 7

pP2⁸

Application: 2HY (prey)
Backbone: pACT11st
Specificity: Sfi non-oriented
Selection: ampicillin
Constructed by: SW



ABS1

CG cgtttgaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagataccccaccaa Bgl II CCCAAAAAAGAGATCTGTATGGCTTACCCATACGATGTTCCAG

Sfi I

Sac II

ATTACGCTAGCTTGGGTGGTCATATGGCC ATG GCC GCA GGG GCC GCG GCC GCA

Nco I

BamHI

Pac I

CTA GTG GGG ATC CTT AAT TAA GGG CCA CTG GGG CCC CTC GAG AGA TCT

Stop

ATGAAT cgtagatactgaaaaacccc GCAAGTT cacttcaactgtgcatcgtg caccatctcaatttc

162

ABS2

53

ABS1 5' CGTTTGAATCACTACAGG 3'

JC90 5' CGATGATGAAGATACCCACCAAAA 3'

162 5' GGGGTTTTTTCAGTATCTACG 3'

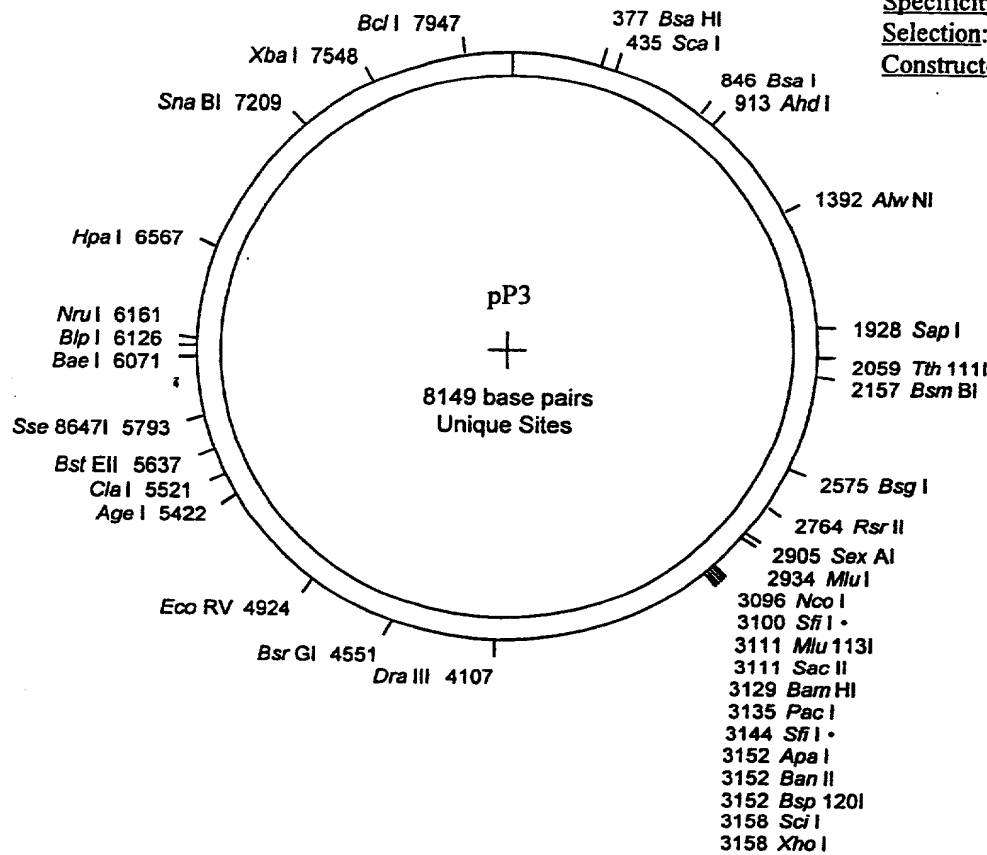
ABS2 5' CACGATGCACAGTTGAAGTG 3'

53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 8

9
pP3

Application: 2HY (prey)
Backbone: pACT11st
Specificity: Sfi oriented
Selection: ampicillin
Constructed by: SW



ABS1

CG cgtttgaatcactacagg GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagatacccccaccaa CCCAAAAAAAGAGATCTGTATGGCTTACCCATACGATGTTCCAG

Bgl II

Sfi I

Sac II

ATTACGCTAGCTTGGGTGGTCATATGGCC ATG GCC GGA CGG GCC GCG GCC GCA

BamH I

Pac I

Nco I

CTA GTG GGG ATC CTT AAT TAA GGG CCA CTG GGG CCC CTC GAG AGA TCT

Stop

ATGAAT cgtagatactgaaaaacccc GCAAGTT cacttcaactgtgcatcgtg caccatctcaatttc

162

ABS2

53

ABS1 5' CGTTTGGGAATCACTACAGG 3'

JC90 5' CGATGATGAAGATACCCACCAAA 3'

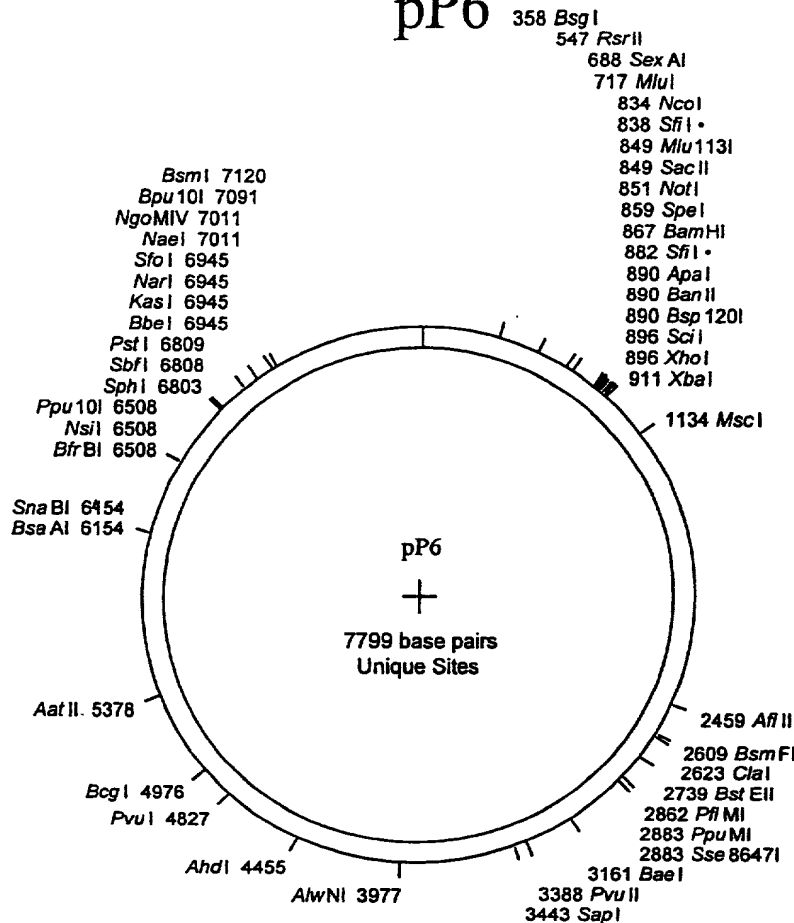
162 5' GGGGTTTTTTCAGTATCTACG 3'

ABS2 5' CACGATGCACAGTTGAAGTG 3'

53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 9

pP6¹⁰



Alias: pGAD3S2XNS1
 Application: 2HY (prey)
 Backbone: pGAD3S2X
 Specificity: Sfi non-oriented
 Selection: ampicillin
 Constructed by: SW

ABS1

cgtttgaatcactacagg GATGTTTAATAACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagataccccaccaa CCCTAGAACTA

Sfi I Sac II Spe I Bam HI
 GCC ATG GCC GCA GGG GCC GCG GCC GCA CTA GTG GGG ATC C
 Nco I Not I

STOP Sfi I Xho I Xba I
 TT AAT TAA GGG CCA CTG GGG CCC CTC GAG TAG CTA GTG TCT AGA
 STOP STOP STOP

GGCCCGGTACCCAATTCGCCCTATAGTGAGTCGTATTACAATTCAGTGGCCG TCGTTT

CAACGTCGTGACTGGGAAAACCCTGATCTATGAAT cgtagatactgaaaaacccc GCAA

GTT cacttcaactgtgcatcgtg caccatctcaatttcttc
 ABS2 53

ABS1 5' CGTTTGAATCACTACAGG 3'
 JC90 5' CGATGATGAAGATAACCCACCAAA 3'
 162 5' GGGGTTTTTCAGTATCTACG 3'
 ABS2 5' CACGATGCACAGTTGAAGTG 3'
 53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 10

pP7

358 BsgI

547 RsrII

688 Sex AI

717 MluI

834 NcoI

838 SfiI

849 Mlu113I

849 SacII

851 NotI

859 SpeI

867 BamHI

882 SfiI

890 ApaI

890 BanII

890 Bsp120I

896 SclI

896 XhoI

911 XbaI

1134 MscI

BsmI 7120

Bpu10I 7091

NgoMIV 7011

NaeI 7011

SfoI 6945

NarI 6945

KasI 6945

BbeI 6945

PstI 6809

SbfI 6808

SphI 6803

Ppu10I 6508

NsiI 6508

BfrBI 6508

SnaBI 6154

BsaAI 6154

AatII 5378

BcgI 4976

PvuI 4827

AhdI 4455

AlwNI 3977

3161 BaeI

3388 PvuII

3443 SapI

2459 AflII

2609 BsmFI

2623 ClaI

2739 BstEI

2862 PfiMI

2883 PpuMI

2883 Sse8647I

pP7

+

7799 base pairs
Unique Sites

Alias: pGAD3S2XNS2

Application: 2HY (prey)

Backbone: pGAD3S2X

Specificity: Sfi oriented

Selection: ampicillin

Constructed by:SW

ABS1

cgtttggaatcactacagg

GATGTTTAATACCACTACAATGGATGATGTATATAACTATCTATT

JC90

cgatgatgaagataccccaccaa

CCCAAAAAAAGAGATCCTAGAACTA

Sfi I

Sac II

Spe I

Bam HI

GCC ATG GCC GGA CGG GCC GCG GCC GCA CTA GTG GGG ATC C

Nco I

Not I

STOP

Sfi I

Xho I

Xba I

TT AAT TAA GGG CCA CTG GGG CCC CTC GAG TAG CTA GTG TCT AGA

STOP

STOP

STOP

GGCCCGGTACCCAATTCGCCCTATAGTGAGTCGTATTACAATTCAGTGGCCGTCGTTTTA

CAACGTCGTGACTGGGAAAACCCTGATCTATGAAT

cgtagatactgaaaaacccc GCAA

GTT cactcaactgtgcatcgtg caccatctcaattcttt

162

ABS2

53

ABS1 5' CGTTTGGAATCACTACAGG 3'

JC90 5' CGATGATGAAGATACCCACCAAAA 3'

162 5' GGGGTTTTTTCAGTATCTACG 3'

ABS2 5' CACGATGCACAGTTGAAGTG 3'

53 5' GAAATTGAGATGGTGCACGATGCAC 3'

FIGURE 11

VECTORS EXPRESSING THE T25 FRAGMENT

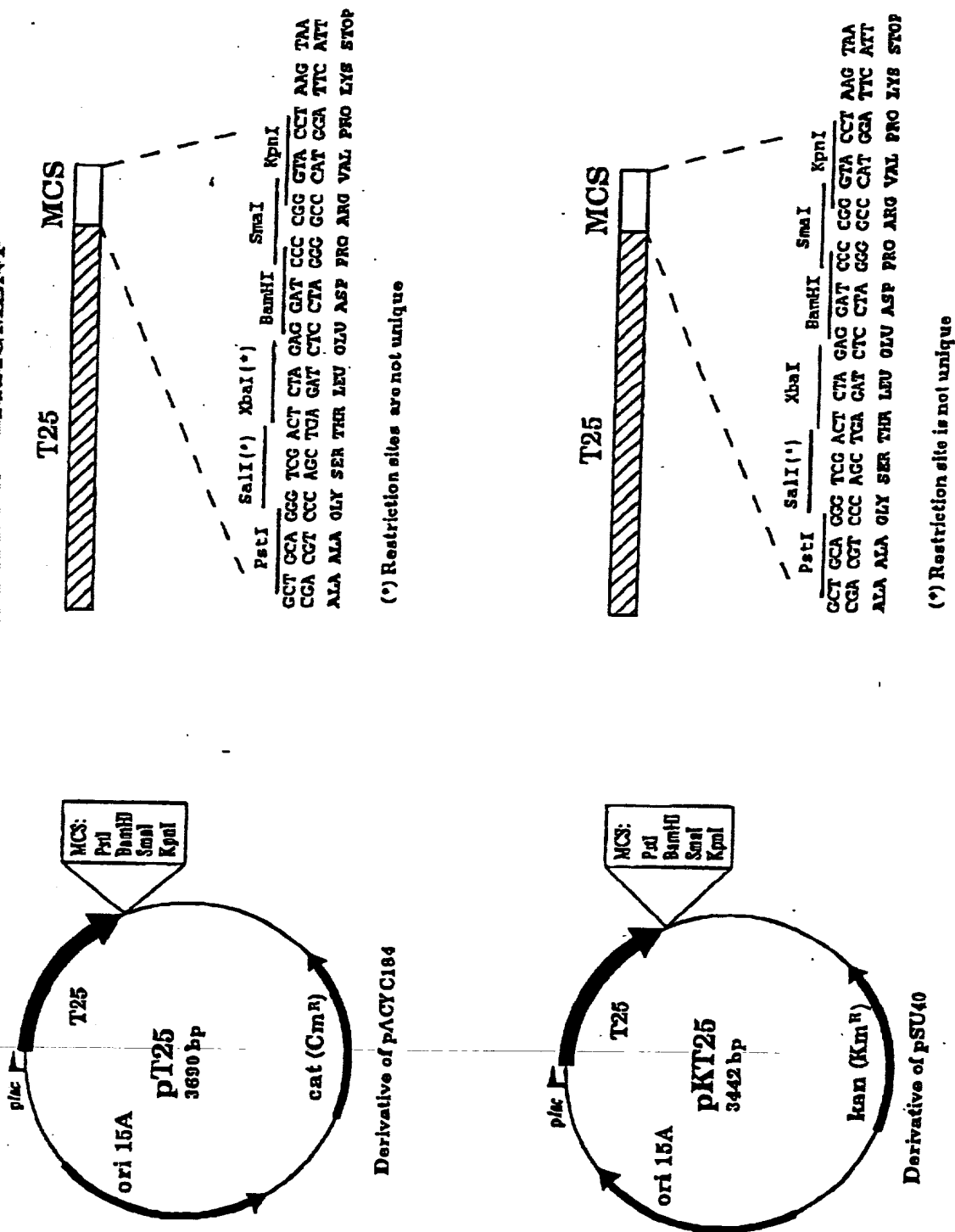


FIGURE 12

VECTORS EXPRESSING THE T18 FRAGMENT

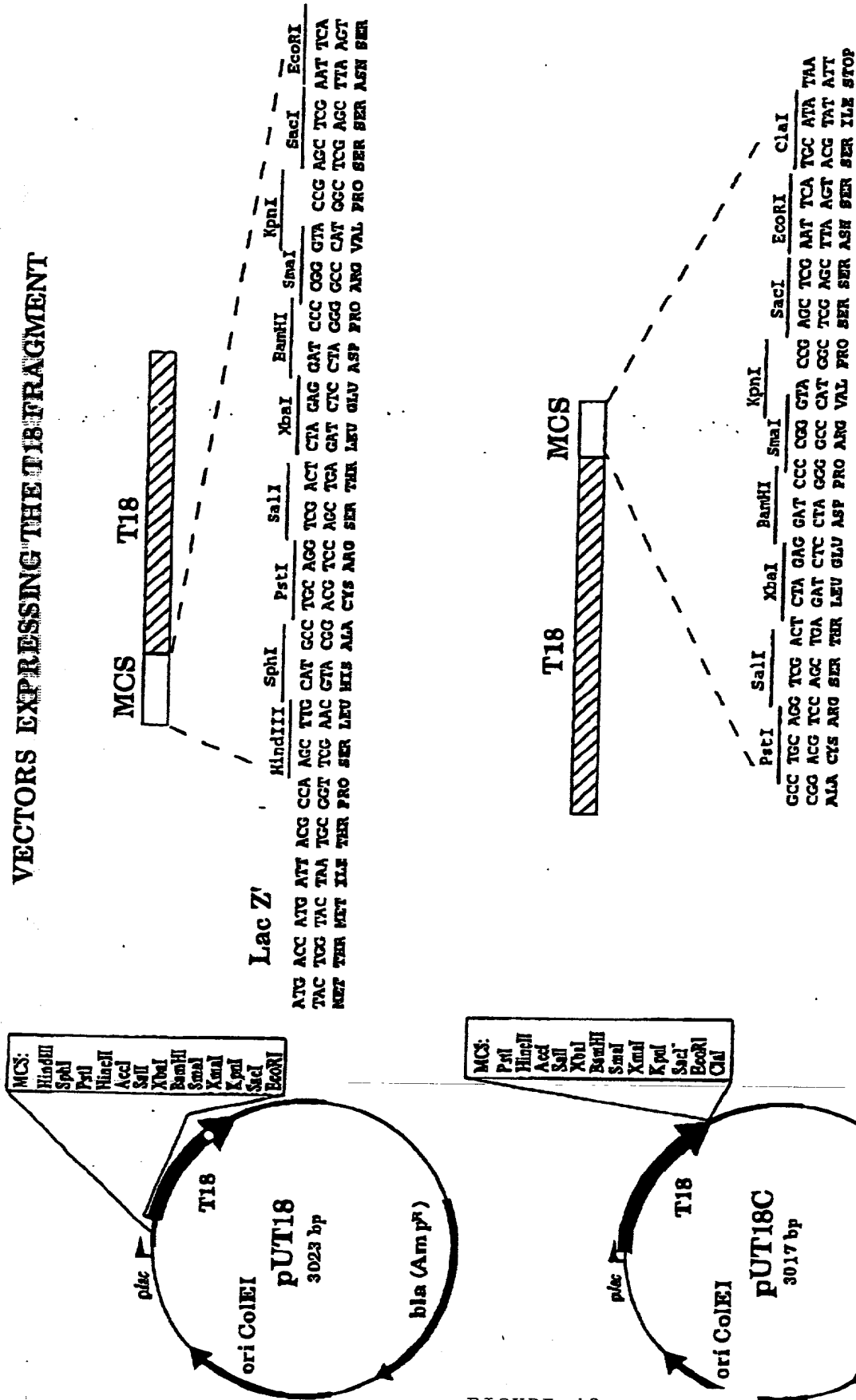
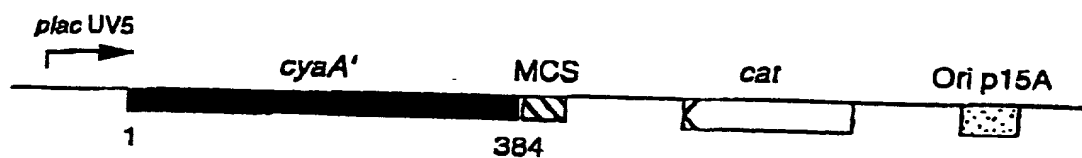
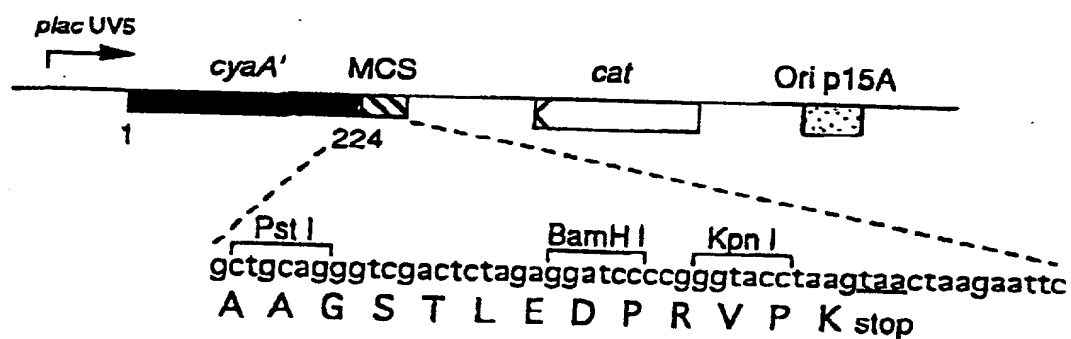


FIGURE 13

pCmAHL1



pT25



pT18

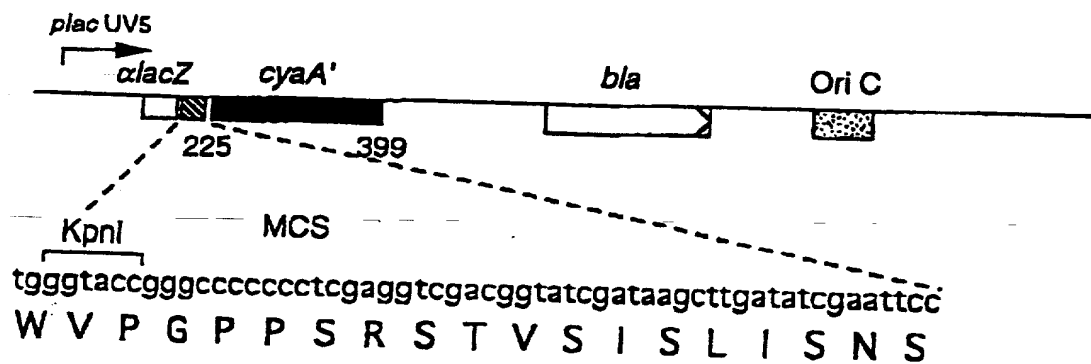


FIGURE 14

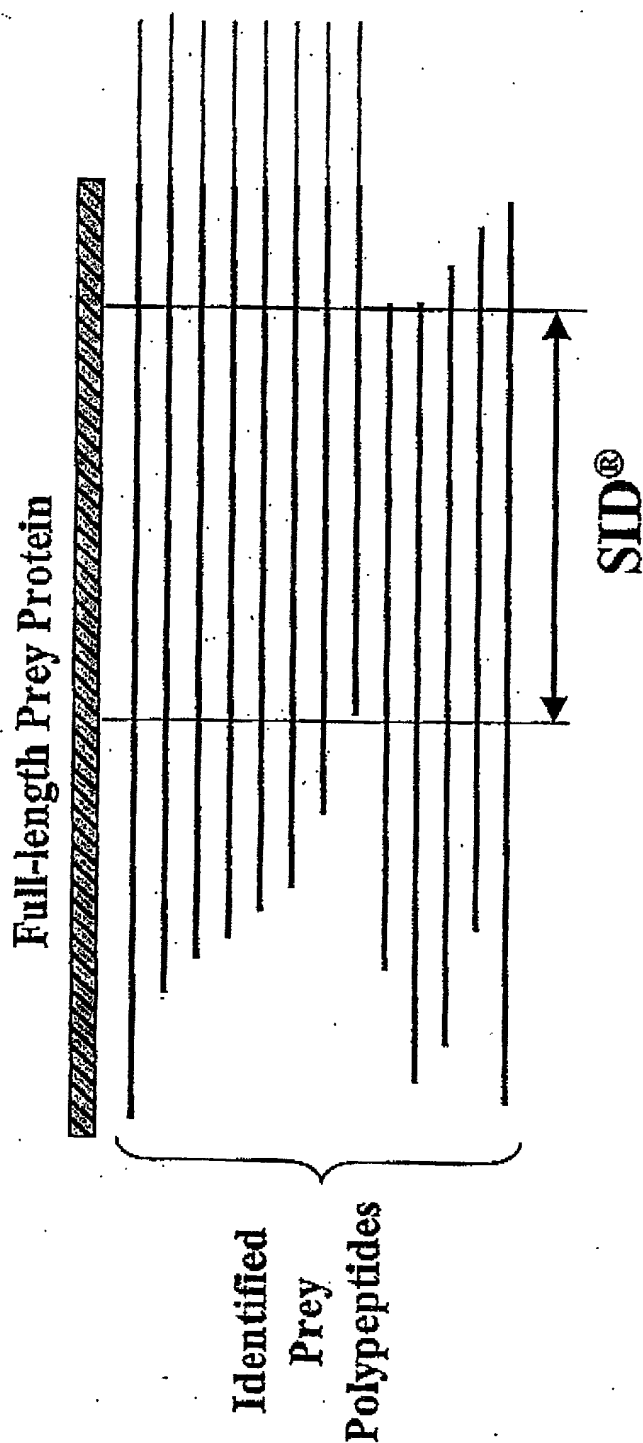


Figure 15: Schematic representation of SID® determination

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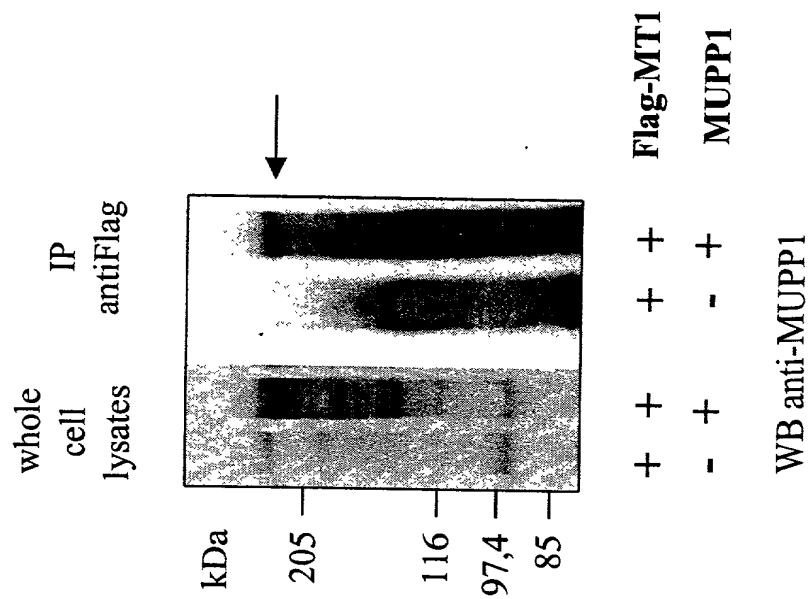
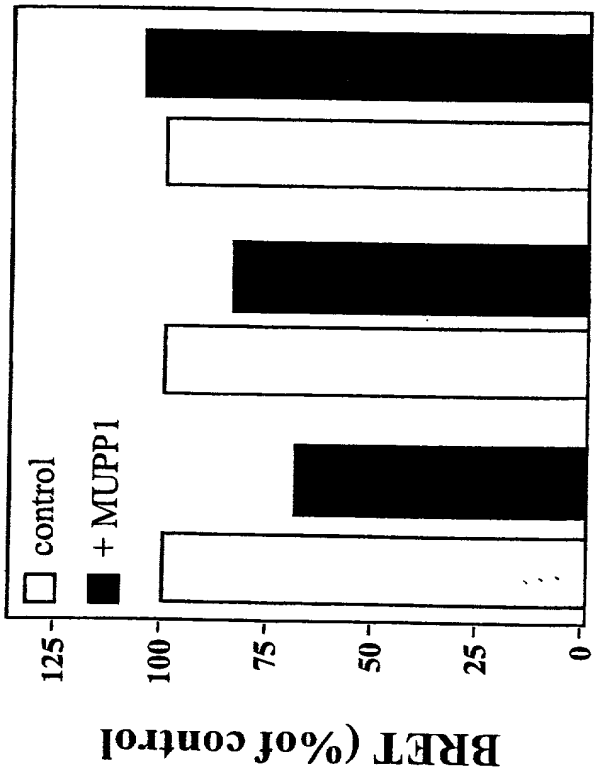


FIGURE 17

A)

Effect of MUPP1 over-expression on the oligomerization of melatonin receptors



MT1R-Rluc	+	+	-
MT2R-Rluc	-	-	+
MT1R-YFP	+	-	-
MT2R-YFP	-	+	+

B)

Competition of energy transfer between MT1R-Rluc and MT1R-YFP by MUPP1

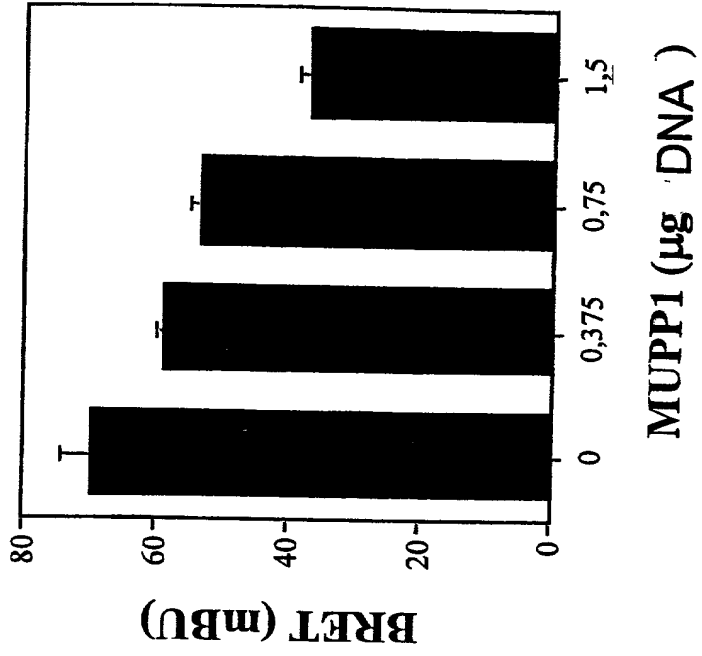


FIGURE 18

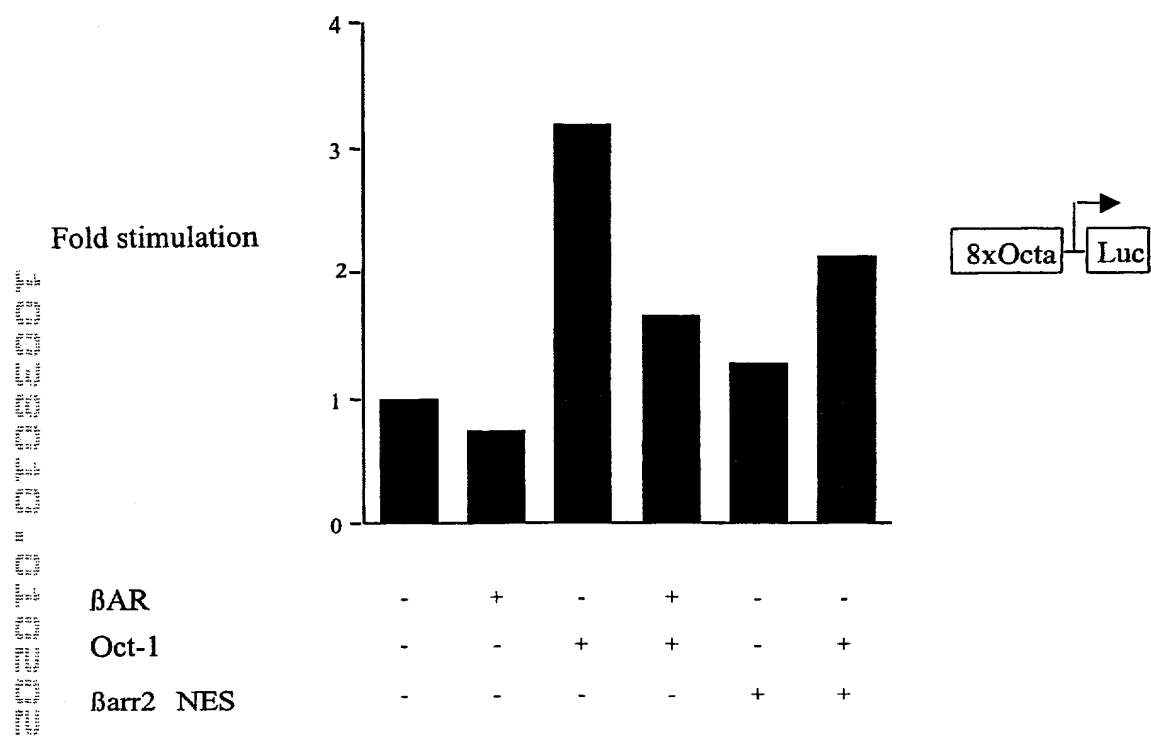


Figure 19